

## REMARKS

By the present amendment, Applicant has amended Claims 1, 2, 7-9, 11 and 20, and added new claims 21-23. Claims 1-23 remain pending in the present application and reconsideration of these pending claims is respectfully requested. The rejections of the office action dated July 29, 2004 will be considered in the order of their occurrence in the Official Action.

**Claims 1-4, 6-10, 12-18 and 20 are rejected under 35 USC § 103(a) as being unpatentable over Kerssies '364**

The instant invention is directed towards reducing the amount of fuel that resides on a nozzle spout after the flow of fuel is stopped. The invention encourages fuel to fall from the nozzle spout and into the container to be filled, rather than drip onto the ground or evaporate off the spout. The difference between the surface tension of the fuel and the surface energy of the spout provides this utility.

The Kerssies reference teaches a fuel nozzle spout with an intended use of reducing post fueling dripping through the use of a blocking mechanism. The Kerssies reference does not teach, suggest, or provide any motivation to choose a low surface energy material with the intended use of reducing residual fuel amounts. But rather, starting in column 3 line 3, the Kerssies reference teaches away from the present invention through the spout being "preferably formed from one piece of stainless metal, for instance aluminum. The pipe piece is preferably provided close to its outflow end with a screwable collar 44 of hardened metal so that in the case of breakage this collar can easily be replaced". The Examiner is reminded that paragraph [0032] of the Applicant's specification describes aluminum to have a typical surface energy close to 45 dynes per centimeter.

Regarding the statement in the Office Action that the use of low surface energy materials, as claimed by the present invention, would be held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice, the Applicant respectfully transposes. The use of low surface energy materials as described and claimed by the

present invention is not an obvious design choice, as is the case in *In re Leshin* 125 USPQ 416, but rather a discovery that provides substantial utility. The utility of the present invention requires a low surface energy material, one that is below that of commonly used and often structurally interchangeable metallic and plastic materials such as aluminum, stainless steel, ABS, and nylon. Without the hindsight of the present disclosure as a whole, one skilled in the art would not have any motivation to choose a low surface energy material. Without the hindsight of the present disclosure as a whole, one skilled in the art would not have any motivation to add a low surface energy coating to a nozzle manufacturing process.

To further clarify and make distinct the materials used in the present invention, compared with any commonly known plastic or metallic materials that would be structurally suitable for the intended use of the Kerssies reference, independent claim 1 has been amended. In addition, new independent claim 23, which is directed towards a low surface energy coating, contains an element and claim limitation that is not taught or suggested by the Kerssies reference and is further distinct over the prior art.

Claims 13-18 and 20, were rejected in light of Kerssies as the method as claimed would be inherent during the normal use and manufacturing of the resulting device. Applicant requests reconsideration of these method claims in light of the arguments presented herein.

**Claims 1,2,5,6,7,8,11,12,13 and 16-20 are rejected under 35 USC § 103(a) as being unpatentable over Slattery '626.**

The Slattery reference teaches an automatic fuel dispensing nozzle with an intended use of automatically shutting off the flow of fuel when a container is approximately full. The Slattery reference does not teach, suggest, or provide any motivation to choose a low surface energy material with the intended use of reducing residual fuel amounts.

Regarding the statement of the Office Action that the use of low surface energy materials, as claimed by the present invention, would be held to be within the general

skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice, the Applicant respectfully transverses. Similar to the Applicant's arguments presented regarding the Kerssies reference, the use of low surface energy materials as described and claimed by the present invention is not an obvious design choice, as is the case in *In re Leshin* 125 USPQ 416, but rather a discovery that provides substantial utility. The present invention is not a mere obvious design choice between plastic or metal, or aluminum and steel, for solely the intended use of providing a rigid fuel spout, as is the case with the prior art, but rather the present invention requires a deliberate decision to solve a new problem—to reduce residual fuel amounts. This motivation is required for anyone skilled in the art to potentially look to use low surface energy materials for fuel dispensing nozzles.

Again, to further clarify and make distinct the materials used in the present invention, compared with any commonly known plastic or metallic materials that would be structurally suitable for the intended use of the Slattery reference, independent claim 1 has been amended. In addition, new independent claim 23, which is directed towards a low surface energy coating, contains an element and claim limitation that is not taught or suggested by the Slattery reference and is further distinct over the prior art.

Regarding dependent Claim 5 being rejected in light of Slattery, Slattery fails to provide any suggestion or motivation for the rib elements.

Claims 13-18 and 20, were rejected in view of Slattery as the method as claimed would be inherent during the normal use and manufacturing of the resulting device. Applicant requests reconsideration of these claims in light of the arguments presented herein.

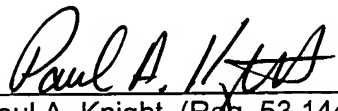
## **Conclusion**

Both the Kerssies and Slattery references fail to teach, suggest, or provide motivation for anyone skilled in the art to use low surface energy materials for the intended use of reducing residual fuel amounts. The present invention is both novel and non-obvious when considered as a whole. The statements from the Examiner

regarding the level of skilled in the art are not substantiated and fail to provide a prima facie case of obviousness due to the lack of providing suggestion, motivation or an expectation of success in modifying the references in the direction of the intended use of the present invention. After consideration of this Amendment, and the arguments presented herein, if the Examiner still believes the claims to not be in a state of allowance the Applicant respectfully requests evidence per MPEP 2144.03 regarding reliance on common knowledge in the art or "well known" prior art.

Applicant respectfully requests that early reconsideration and allowance of this application be given. Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawings, then it is respectfully asked that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the this case to issuance. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, they are invited to telephone the undersigned.

Respectfully submitted,

  
Paul A. Knight (Reg. 53,144)

09-17-2004  
Date

4127 South Hatch Street  
Spokane, WA 99203

Telephone: (509) 953-6271  
e-mail: pk@knubox.com